

Proposal for Follow-up Activities

I. Joint project on creating a nursery network for breeding seedlings of trees and bushes in the Gobi, steppe region

1. Background

According to the definition of UNCCD, almost 90% of Mongolia's pastureland is vulnerable to land degradation and desertification. A recent assessment of desertification in Mongolia shows that 5% are very severely, 18% severely, 26% moderately and 23% slightly degraded. This means almost all grasslands are under threat of desertification and roughly 72% of the total territory is degraded to some extent.

Especially severely and very severely affected areas include dry and semi desert lands of the Uvs lake basin, the great lake depression, and Dundgobi and Dornogobi aimags. There are 145 settlements of sub-provinces in gobi and steppe region experiencing sand burial and shifts.

Climate change is pronounced in Mongolia with an increase of the mean annual temperature of 2.1°C between 1940 and 2007 with an accelerating trend in recent years.

In comparison to the year of 1960, the number of days with dust and sandstorm events has multiplied between 3 and 4 times, with 61-127 days of such events in the Gobi and in the great lake depression.

Since 1970, 125 thousand hectares of Saxaul stands have been destroyed and 370 thousand hectares lost their regenerative capacity due to people's utilization of sexual timber as energy source for heating and cooking. Abandoned croplands, mining activities and unpaved multi-track roads also directly contribute to land degradation and desertification.

2. Project objectives:

The main objectives of this project are to create a nursery network in the Gobi-steppe region, and to increase the number of seedlings planted in the nurseries. To achieve these objectives we have the following goals:

2. To assess and rehabilitate old, non-productive and destroyed nurseries;
2. To build new nurseries with the estimation those capacity;

2. To provide on-site training for local experts

3. Project actions:

Objective 1. To assess and rehabilitate old, non-productive nurseries

- 1.1. To renovate old nurseries in Bayankhongor, Dundgobi, Dornogobi and Gobi-Altai aimags, and increase their capacity.
- 1.2. To breed rare and extinct species of seedlings in the nurseries

Objective 2. To build new nurseries with the estimation those capacity

- 2.1. To choose the site for the nurseries
- 2.2. To create medium scale nursery in gobi and steppe region
- 2.3. To choose tree and bush species which can be cultivated in this region

Objective 3. To provide on-site training for the experts and nursery workers

- 3.1 To provide training for local experts from gobi and steppe region provinces

4. Phases of the projects:

The project is designed to be implemented in 2 phases as follows:

- First phase (2013-2014) : The site will be selected and joint research on establishing and renovating of existing nurseries will be provided. Selection of technology, species and the experimental work will be done in selected areas
- Second phase (2014-2018): The main activities for creating a network of nurseries will be done in selected areas.

5. Expected results

- The nurseries for local species will established and the total capacity will be improved.
- Trained experts will be available for further activities
- Appropriate technology for creating nurseries will be available
- Local experts will gain experience in nursery work

6. Estimated budget: To be discussed

II. Rehabilitation of soil and vegetation cover of the degraded Pasture Land in Specific areas of Mongolia

1. Background

According to the definition of UNCCD, almost 90% of Mongolia's pastureland is vulnerable to land degradation and desertification. A recent assessment of desertification in Mongolia shows that 5% are very severely, 18% severely, 26% moderately and 23% slightly degraded. This means almost all grasslands are under threat of desertification and roughly 72% of the total territory is degraded to some extent.

Especially severely and very severely affected areas include dry and semi desert lands of the Uvs lake basin, the great lake depression, and Dundgobi and Dornogobi aimags. There are 145 settlements of sub-provinces in gobi and steppe region experiencing sand burial and shifts.

Climate change is pronounced in Mongolia with an increase of the mean annual temperature of 2.1°C between 1940 and 2007 with an accelerating trend in recent years.

In comparison to the year of 1960, the number of days with dust and sandstorm events has multiplied between 3 and 4 times, with 61-127 days of such events in the Gobi and in the great lake depression.

Overgrazing is the major cause of land degradation and desertification in Mongolia. This is a result of inappropriate method of pasture land use. According to an assessment by the Agency for Land Affairs, Construction, Geodesy and Cartography, livestock population is increasing continuously in the past few years and pasture carrying capacity was exceeded by 32.5%, which is equivalent to an excess of 16 million sheep units. Due to changes in formation of livestock head, the number of goats rose up and constitutes 46% of the formation of livestock head and this causes the overgrazing.

Since 1970, 125 thousand hectares of Saxaul stands have been destroyed and 370 thousand hectares lost their regenerative capacity due to people's utilization of sexual timber as energy source for heating and cooking. Abandoned croplands, mining activities and unpaved multi-track roads also directly contribute to land degradation and desertification.

2. Project objectives:

- To provide situation analysis of soil and vegetation cover of degraded pasture land
- To improve the soil quality and vegetation cover on selected area
- To establish nursery for seedlings of local trees and vegetation
- Training of Mongolian local experts

3. Phases of the projects:

The project is designed to be implemented in 2 phases as follows:

- First phase (2013-2015): The site will be selected and joint research on soil and vegetation cover will be provided. Selection of technology, methods and the experimental work will be done in selected areas
- Second phase (2015-2018): The main activities for improving of the vegetation cover and soil quality in selected areas.

4. Expected results

- The soil quality and vegetation cover of selected area will be improved.
- Trained experts will be available for further activities
- Appropriate technology for improving pasture land will be available
- Local experts will gain experience in improving pasture land

5. Estimated budget: To be discussed

III. Project on creating a network of nursery perennial plants for improving the vegetation cover

1. Background:

In National Programme to Combat Desertification, and other policy documents highlighted the expanding of the activities concerning the restoration of degraded areas and the introducing of new technologies to combat desertification.

In last 3 years some researches have been done by Mongolian scientists to establish nurseries of Mongolian species of perennial plants Spiraea (Spiraea L.). The result of the study shows that these species can be used for restoring the degraded pasture land and for improving vegetation of the urban areas.

The standard of growing of 4 species had been approved by Scientific Committee of the Ministry.

In Mongolia, above mentioned 11 species spirea grow in the mountains Khentei, Khangai, Altai, Hyangan, deserts and steppe areas in Dornod, Dornogov. Based on the result of the studies it is proven that 4 species selected for restoring degraded areas.

2. Objectives of the project:

In order to use the selected 4 species nurseries should be established in specific areas. The objective of the project is to establish network of nurseries in Dornogobi, Dundgobi, Tov, Ovorkhangai, Bayankhongor, Gobi-Altai, Khovd and Sukhbaatar aimags.

3. Project implementation period: five years

4. Budget: The required financing for establishing of the network is US\$800,000